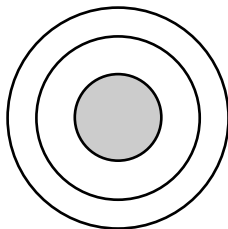


A Model of the Atom

The **model of the atom** helps explain why objects become electrically charged.



- All matter is composed of **atoms**
- The **nucleus** is the core of the atom, and contains **protons** (positively-charged) and **neutrons** (uncharged)
- Protons cannot move out of the nucleus
- The **electrons** (negatively-charged) orbit the nucleus. They can move from one atom to another
- Some atoms have a stronger hold on their electrons than others
- A single atom is electrically neutral because the number of protons and electrons is equal
- If an atom gains an electron, it is negatively-charged and is called a **negative ion**
- If it loses an electron, it is positively-charged and is a **positive ion**